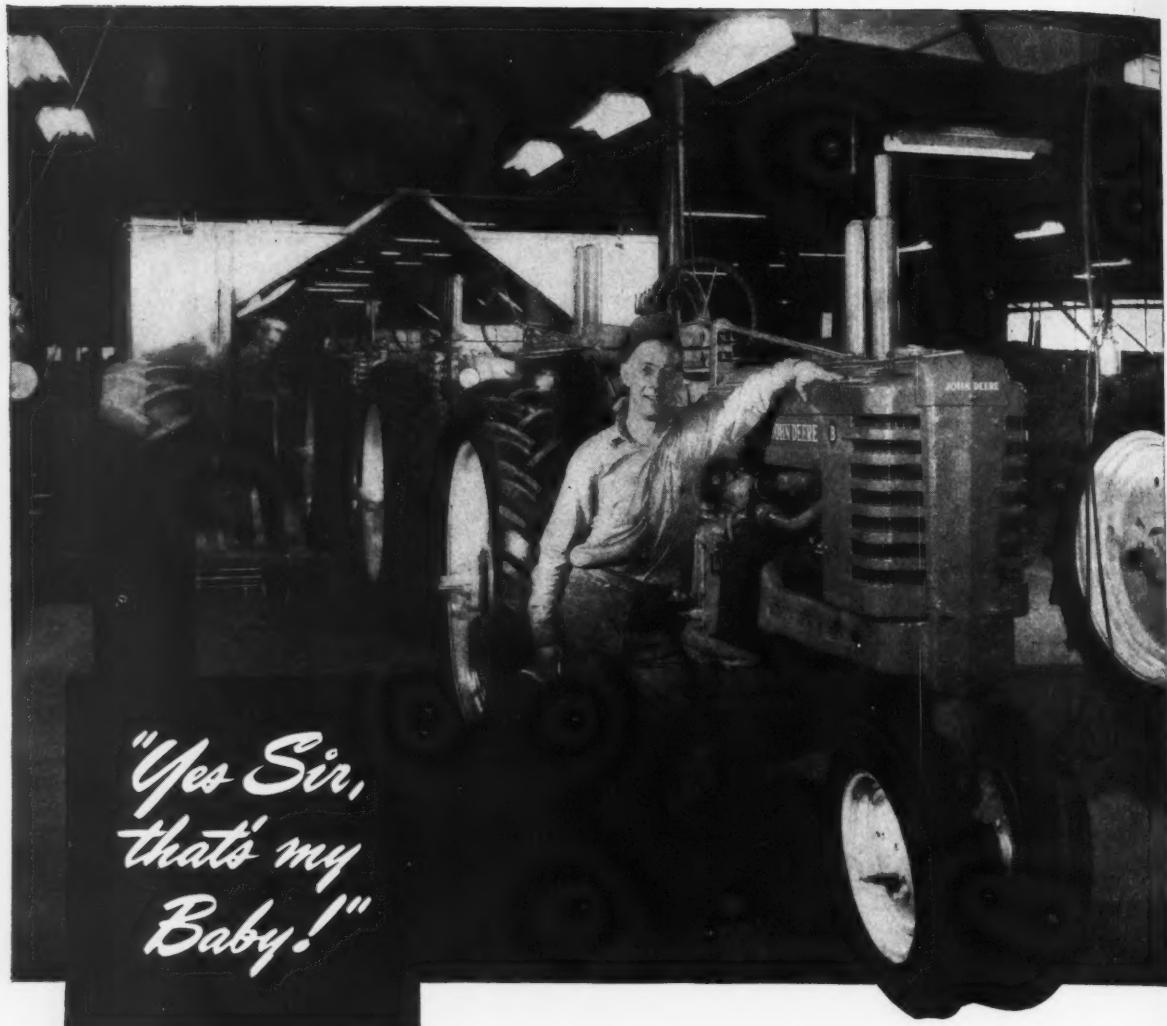


Cornell COUNTRYMAN



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There's Something New Under the Sun . . .

IF YOU have the idea that everything in agriculture has been discovered and all the improvements have been made, a look at the research going on at Cornell and its experiment stations should change your mind.

Plant scientists are breeding disease resistance into potatoes and are studying the possibility of pelleting onion seed to prevent diseases of those plants. New types of sprays are being perfected for disease and insect control and apple trees are being fertilized by urea sprayed on the leaves. Improved varieties of field crops and vegetables are being developed.

Research isn't confined to plants, of course. It ranges all the way from the development of a hydraulic logging arch to pure research in methodology. It includes marketing studies to increase farmer income and give the consumer a better product. Animal and poultry nutritionists are working on ways to use the country's feed supply more efficiently, and conservationists are finding better ways to use our natural resources.

These are only a few of the more than 700 projects under way at Geneva and Ithaca, and there are more to come. There will be more research next year and in the years after, as long as problems exist or improvements can be made.

New York State College of Agriculture
at Cornell University

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OUR COVER . . . June is come and thousands of Cornellians are going here, there, and everywhere. Is the fastest way the best way? Editor Gilman, of the Art Department provides transportation for all.

The Cornell Countryman

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49



The Revolution

Comes the revolution? No—some new officers maybe, but no revolution please.

New editors, unfortunately, are noted for their flowery plans for the future, their great changes to come, and their sweeping statements of the responsibility of the press. Let's have none of that here.

There's a family at Cornell—one we all know. Some call it the college family. It consists of the students, faculty, and alumni of the University. The COUNTRYMAN serves the family of the ag and home ec colleges.

Now that's a high-sounding purpose. But fortunately, (for the staff) it isn't our only purpose. The COUNTRYMAN is somewhat of a fellowship for its members. We have fun with each other as personalities, whether it be a heated staff-meeting discussion over a course guide, or a lunch table conversation at one of the campus cafeterias.

Ag-Domecon and the COUNTRYMAN are the two student service organizations for the upper campus. The two organizations have entirely different internal structure but both have the same objectives in mind. Everyone knows that two horses can pull a bigger load if they're both pulling on the same evener. We hope that throughout the coming year, Ag-Domecon and the COUNTRYMAN can work together as a team.

The last point to talk over is reader's comment. It is an unusual magazine indeed whose readers can't find fault with it. If you enjoy writing letters, why not write us one? If you are on campus and you don't like letter writing, stop and talk with one of our staff members. This is the best way you can help us make the COUNTRYMAN a better magazine.



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DEPENDABLE—that's the word for G.L.F. Petroleum Service. Every week or two (depending on an agreed upon schedule) that big red G.L.F. petroleum truck pulls into the farmyard and drops enough gasoline, kerosene or fuel oil to last until the next pre-planned delivery date.

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Late spring means longer hours when the weather breaks right. Tractors will run from early morning to late at night, and more than the usual amount of fuel will be used. Your G.L.F. farm service man will make it a point during the busy spring season to watch the level of your gas tank and make larger deliveries if you wish.

G.L.F. FARM DELIVERY **Gas Service**
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Rainmakers Know

How To Make Clouds Cry

By Judy Zucker '53

Boom—into the clouds went the cannon balls. Nothing happened. Bang—into the sky exploded the dynamite. Still nothing happened. These were man's first spectacular attempts to control the weather, sparked by the droughts of the 1880's.

Since then, more scientific methods of getting it to rain when you want it to, and to stop when there's enough, have been proposed. Some of the methods have been tried, and one is the foundation for a booming business out West.

The story of development in the field of weather control is one that concerns both eastern and western states. It started in the East, in the General Electric labs at Schenectady, N. Y. In the fall of 1946, three scientists working there came out with three ways to make water vapor in clouds turn into snow and rain.

Vincent Schaefer, who had never finished his high school education, tried several ingenious experiments with supercooled clouds made by his breath in a home freezer, but couldn't get snow to form in them. One hot summer day he tried cooling the freezer by putting in chunks of dry ice. Suddenly the long-sought-after snowflakes began to form. By accident, Schaefer had discovered something which got the clouds so far below normal cloud temperature that ice crystals formed spontaneously!

Dr. Irving Langmuir, a physical chemist and Nobel prize winner, went to work on the theories of artificial precipitation. He found out which of the four existing kinds of ice were being produced by this dry ice. He worked out a theoretical method of producing rain by dropping a certain kind of water drop into a non-supercooled cloud—the fleecy kind that float by all

summer, especially over arid regions. This method has not been tried yet in the outdoors.

Dr. Bernard Vonnegut, a physicist from MIT, found a substance whose crystal structure and size was so nearly that of ice that small particles of it tossed into a cloud would act as nuclei to start ice crystals growing. This was silver iodide, but the first trial of it was very discouraging. The batch was found to be impure, and further trials worked beautifully.

After many trials and tribulations, these men came out with a new science. Schaefer tried actual airplane flights to seed clouds with

Ohio, California, and the Gulf Coast. They say that it is still too early to say what can be done in the field, and that a good deal more investigation must be done before conclusions on cloud seeding effects can be formed.

In the meantime, the West, which, unlike Ithaca, has always been pretty desperate for water, has taken up the new science. Westerners feel that they can make observations and collect information while they actively carry on cloud seeding, instead of holding up everything until several years' investigation is made by the Government's method.

The man who has spearheaded the cloud seeding attempts in the West is Dr. Irving Krick, former head of the Meteorology Dept. of Cal Tech. He and the staff of that Dept. had already left that institution to set up their own private weather-consulting service, and had started the non-profit American Institute of Aerological Research.



It started in the east but now it's a nationwide concern.

—Cannon

dry ice, but this was stopped when a heavy snowstorm coincided with one of his seedings. General Electric stood in imminent danger of damage suits!

So the Army Signal Corps took over the field research job and began Project Cirrus in cooperation with the Navy with General Electric scientists as consultants. The U. S. Weather Bureau was moved to start a plan for evaluating different methods of cloud seeding as they came up. They later conducted more than 100 experiments over

Using the information and past weather records gathered by these organizations and the U.S. Weather Bureau, another company was formed to experiment with rain increasing, rain suppression, and related water problems on a large scale. This baby brother of the Research Institute was organized in March, 1950 in Pasadena, Calif., and called the Water Resources Development Corporation. Its meteorologists have recently moved its headquarters to Denver, Colorado

(Continued on page 20)

Westward the Women

The Go West Club is proving that young women can head for the wide open spaces, too

By Esther Church '53

How did it all start? We can't remember—a lunch table conversation maybe and then . . . like Topsy, it just sort of grew. We decided that for most of us this was our last summer for doing something different, and to us Easterners who have never been west of Buffalo, Margot's tales from Wyoming certainly sounded different. So it began with a hilarious discussion. As the months have passed, the discussion continues just as hilariously as ever.

Encouraged by Westminster's successful ventures in previous summers, just before Christmas vacation we decided to get together for our first informal Go West Club meeting. At that stage of the game we thought this should be a co-educational venture. Cal Graziano was eager to be a heap-big-fire-fighter in the Rockies, while Pat Fessenden thought he could take time out after his NROTC vacation cruise to join the party. Frank Exman had plans for following the

wheat harvest. Tex Severens strolled in to drawl a few comments and suggested that if we didn't stop at Texas we might as well stay home.

The mad planning began. Pat suggested hiring a bus and paying for it by plastering advertisements from bumper to bumper. Another bus idea was to work an exchange transportation scheme with Western college students wanting to come East. This first meeting set the precedent for succeeding meetings—lots of talk and little action.

Solution?

With January a new member, Carolyn Canaday came up with a solution to our transportation problem. A 1932 Ford truck was far from luxury, but certainly beat hitch hiking, or so we thought until shocked comments from some of the fellows made us stop and consider some of the mechanical difficulties that might come up. "But," said Rachel Homet, "Donna, Than, and I are taking Ag. Eng. 10." Caro-

line's father settled the problem by saying we couldn't have the truck after all.

Lack of transportation did not discourage us. We began looking for jobs, anyway. "Yellowstone's the place," advised Don Buckeye, who was a gas station attendant there last summer. "The dude ranches are the best bet," said Margot, "even though they pay the cowboys to go out with the lady dudes, so the employees don't have a chance."

"Follow the fruit and vegetable harvest," suggested Fred Muller. "You can start with the spinach harvest and work your way West. Only be sure to join the National Teamster's Union before you start, or you won't be able to work at harvesting and canning."

Needing professional advice, we asked Mrs. Wood of the Home Economics Placement Office what she thought. Said Mrs. Wood, "I admire the spirit of adventure in seeking jobs that will give an opportunity to see another part of the country. Accepting jobs sight unseen in resort hotels is a questionable procedure, since living and working conditions are unknown factors. However, placement through national office of such organizations as the Girl Scouts, Camp Fire Girls, or Y.W.C.A. is a safe enough proposition that would probably be endorsed by the most conservative parent."

Writing Letters

So what did we finally do? Wrote letters, and more letters. Division of labor made it possible to cover a lot of territory without duplication. So, Yellowstone, Eaton's Dude Ranch, Hamilton Stores, Hitching Post Lodge, Mrs. Rosa Crabtree, National Campfire Girls Association, and many more received letters saying, "several girls attending Cornell University are looking for jobs in the West this summer, etc." Airmail, rather than pony ex-



—Cannon and Fallon
Esther Church, Donna Noyes, Than Skillicorn, Joan Skillicorn, and Margot Pringle practice their traveling technique.

press started our two-way communication with the unknown regions.

"I'd like to buy a car and get a job out West this summer," announced Ellie Ullman one day in February. We immediately made her an honorary member of our Go West Club, and considered our transportation problem solved. We figured that where there is one car, there is bound to be another sooner or later.

Camping Out

Elated over the prospect of a car, we began making plans for camping out on the trip West. Lorrie Hala, a camper from way back, had some good ideas. "We can save money by camping out in sleeping bags when the weather is nice. But when it's raining, tents are too cold and damp so it's better to stay in cabins. We might as well leave the tents home, they're just extra baggage." She also advised getting one good meal a day, preferably at night, and eating the other meals in the car.

"Don't sleep on the main highways," Joe Rieman emphasized. "It isn't safe." Donna's idea was to sleep in National and State parks when no friends and relatives are willing to put us up. Already Joan Thostesen has offered us accommodations in Chicago. We are glad to accept any other offers of this sort.

Westminsterites who went West last summer had some experiences sleeping in National parks. This story came from Annabell Murdock. The truck load of kids pulled up next to a filling station in one of the national parks. They rolled out their sleeping bags as usual, and went to sleep. Splashes of cold water awakened them early in the morning. It was raining? No—they were sleeping under the park's sprinkling system.

Financing the trip west is a major problem, so whenever we get together for meetings, or lunch, we discuss ways and means. Anne Batchelder suggested getting a nationally known food company to sponsor us by our eating their food exclusively on the trip West and back. Another food idea was that we act as an experiment group for Cornell, eating an exclusive diet of



—Cannon and Fallon

As part of their cowpuncher training, Joan and Esther discuss the points of a purebred with Margot and Than.

Cornell's high protein bread, and water.

The freak show idea came up one day at lunch. With Margot as the fat woman, Anne Batchelder as the laughing henna, Dot as the hula-hula girl, Donna as an African bush woman, and Than as the snake charmer, we thought our show would be a sure hit in all the Western towns.

Then the blow fell. Ellie could not drive out West after all. A permanent job offer came up that was too good to refuse. So, instead of going West, Ellie starts work in a chemical plant the first of July. At this low point in our career, Rachel suggested that we could probably get a nice hearse for very little money.

Than and Joan Skillicorn saved the trip. They returned from Spring vacation with a parental promise of the family car. As Joan said, "the car, a '41 Buick, is the ideal solution, because we know all its idiosyncrasies, like how much oil it burns. Besides," she added, "it has puncture proof tires."

Skillicorn Family Car

Saddled with the responsibility of a car, Joan and Than are having a few qualms. None of the girls have had much experience with long distance driving, and what happens if the car breaks down? Every night during Spring Vacation, Than got

driving lessons from Joan and parents so she could drive West this summer. "You can do it," said Paul West confidently, "especially with the cars of today, with their new improved brakes."

Applications Answered

Meanwhile, replies were coming from our job applications. Most of the national parks do not hire without personal interviews. Yellowstone does not notify employees before May 2. Many of the hotels and lodges do not need extra help.

Good news came from the Campfire Girls. Joan and Donna had interviews with the regional director of the Campfire Girls when she was at Cornell. Through her recommendations, and by applying at the national office, the girls received two good offers for camp counseling jobs. They have tentatively accepted the offer of a camp on an island in Puget Sound, Washington. The camp, which has 300 acres of wooded forest, has 250 new campers every two weeks. Donna's only worry is "how are we going to get the car over to the island."

Paradise Dude Ranch in Buffalo, Wyoming offered Dot Klimajeski the position of second cook. Wyoming Jack O'Brien's breezy folksiness, and his over-emphasis of "Fun All The Time" at Paradise Dude

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From Harrows to Hairpins

*Versatile Ag Eng Department
has a future as ambitious as its past*

By Bob Fallon '54

Down through the years, the Ag Eng department has existed under many colorful names: Farm Mechanics and Engineering, Agricultural Engineering and Architecture, Rural Engineering, and finally, Agricultural Engineering. Ever since the years when there were just two courses—one dealing with the inspection of roads, bridges, and farm buildings, and one dealing with farm buildings in general—the department has been characterized by a nomadic existence. Its first headquarters moved from Morrill to Roberts, to Stone, and to East Roberts. The next move was to a temporary building on the site of the present Agricultural Library, and finally, after a few years in Caldwell, out to Judd Falls Road near the Judging Pavilion. The department now does its instruction in a "U"-shaped laboratory building, the U.S. Engineers' Soils Building on the east end of Tower Road, two quonset huts, and on the first and fourth floors of Stocking Hall.

The list of courses offered in the department is broad. Rare is the ag student who does not find himself tangling with hoists and elevators, pump systems, or an oxy-acetylene welder. Welding has long been recognized as a means by which

farmers can save precious dollars by repairing, instead of replacing, worn or broken machinery. Somewhat more unusual, is the course in Household Mechanics, to which only women are admitted. Sewing machines, automobiles and a hundred and one household appliances are the main topics of instruction.

But the work of the department extends beyond basic instruction, encompassing research projects in such fields as the construction and maintenance of low-cost town roads and the costs and operations of sprinkler irrigation systems. There is a secure bond between this kind of work and that of the majority of the other departments, for who else would develop the structures and equipment of dairy barns, or the design and construction of poultry housings?

Extension Work

Illustrative of the increasing pressure for all-out mechanization is the enrollment of over 550 students a term, in 20 courses. The staff has a far-reaching extension program which makes available the services of specialists in this field and relays any new developments and ideas to the farms all over New York State.



Professor O. C. French
Head of Agricultural Engineering

In 1944, plans for a new building for the Department were initiated. Complete plans for the erection of the building, which will house the entire department under one roof, were finished in February of 1950. Since then, actual construction has been postponed due to the immediate demand for a new agricultural library. As soon as funds are appropriated for the construction of this building, (cost estimated at two and a quarter million dollars) operations will get under way. Since the building now holds first priority on the Ag campus, it is hoped that work will begin within the next few years. Its site is to the south of Wing Hall, and will extend all the way back to the present Ag Engineering laboratories.

Once facilities are available in the new building the department will begin to issue regular degrees in Agricultural Engineering. By combining the curriculum of the Ag Eng department with that of the Engineering College, students will receive a degree in Agricultural Engineering after completing a five year course.

Agricultural Engineering is no longer the child it was 30 years ago. A prime factor in the agriculture of a mechanized society, it has grown into a complex of tractors, mowers and planters—into combines too large for the road and into spacious barns served by complete electrical and water systems.



"... and over there is the carburetor."

Life is bound to be lively for the Female on a Farm

By Margot Pringle '53

Somebody once told me that any farmer who hired a girl would have to be crazy; and maybe that explains some of the people I have found myself working for. Woman's place may be in the home, or the office, or the factory, but apparently it is *not* in the barnyard. At least that is the prevailing attitude of most farmers, who look utterly terrified when approached by a job-hunting young lady. It is a rare farm that will hire a girl at all, and as a result the female aggie has to take what she can get. If my experience is at all typical, she is apt to land on an extraordinary outfit.

First Job

I was initiated into the science of the land the summer I graduated from high school. I advertised for a job in local farm papers and ended up miles from anywhere in the real "sticks" country of Virginia. It was one place where the cows had a higher standard of living than the people. The barn was all electrified and modern, but the house had never seen electricity, or plumbing either. The farm was owned by an autocratic old lady whose 250 pound sons barely out-tipped her on the scales. I will never forget the look in her sullen little eyes when she was introduced to the new hired hand. I broke my neck trying to please her in the next few days, but it was a tough proposition. Those two boys really minded her when she laid down the law and it was easy to see why.

My job was to help around the dairy and do whatever odd jobs I could. My first joyful moment came when Edwin, the older son, found out that I had innocently washed the milking machine pulsators along with the other apparatus. He was a noble specimen who could lift a full milk can in either hand; I used to think of him as the Hayseed Hercules. When he dis-

covered the pulsators at the bottom of a tub of hot water, his face was a sight to behold. He must have been a genius of some sort, because he started them again. If they had had to milk that herd by hand I doubt whether I would have lived to tell the tale.

Nobody on the farm had gotten past the third grade in school, and I guess they hadn't been away from the place for some time. They did a pretty good job of farming but the house was really in pieces; shiny new farm machinery had come before lumber or paint. The old lady had gone through a lot to keep the place, and she certainly guarded it with her life. She regarded me with the most intense suspicion. Before long she began making cracks about my intentions toward her sons. The two of them got in a fight one evening, for undetermined reasons, and the next day she announced to them that it was either her or me. I took the hint.



My second job that summer turned up in the office of the Leesburg county agent. A lady came in to ask about dairy rations, and I accompanied her out to their milking shorthorn farm. It was a beautiful place in rolling hill country, with a fine old houseful of books and sporting prints from England.

The owner was a gentleman farmer who had dabbled in everything from politics to financial journalism. Whatever knowledge he lacked in farming he made up by sweeping flights of originality. I learned many things from him; that if a bull chases you the best defense is to slap him in the nose; and that turkey heads and feet along with assorted interior by-products are a wonderful fattening feed for hogs. The hired man nearly went out of his mind trying to comply with the requests that came along. I will never forget the day we were supposed to measure the bull, to see whether he would fit into the new truck. It was a very hot day, and any bull would have objected to being routed out of the cool creek and driven away from the cows. I stayed well out of the way while two men danced about as nimbly as matadors, taking turns dodging the enraged Emperor. When they finally got him into the barn he tore two stalls down. He was never measured!

Modern Methods

My first task on arriving was to help them combine a field of barley. The field had grown up with chokecherries so thickly it looked like a young orchard, and we set forth in a strange procession to tackle it. The hired man drove the tractor—an old style "Dear John" with a flywheel on the side, that took a considerable amount of hard cranking to start. It was pretty beat up and it kept stalling, which did not help the general air of cheerfulness. Following the tractor came the boss on the combine, sporting a tropical hat of the style worn in Africa by Dr. Livingstone. He was tying bags and kicking them off the back of the machine with a vengeance. And where was I? In the advance guard, mind you—leaping along in front with a pair of kitchen scissors, snipping down chokecherry bushes before the combine got there.

The summer was an endless procession of such events. We had a team of Beltsville veterinarians out every two weeks who were conducting research on the herd, and their visits were always a delight. They often brought distinguished foreign guests along to view the

(Continued on page 22)

The Cornell Countrywoman

Cute, Cool and Colorful

Willard Straight Prevues The Styles for Spring

By Barbara Chamberlain '53

New spring fashions were modeled in a pre-Easter show at Willard Straight Hall on April 4. Not only were gay cotton prints and billowy formals modeled for the coed, but a liberal sprinkling of white bucks and grey flannels previewed the spring fashions for Joe College as well. The fashion show was sponsored by the Men's and Women's Activities Committees of Willard Straight Hall and the Fashion Fair supplied the women's styles while the men's fashions were from the Sport Shop.

Pat Wehman, '54, and Marvin Anderson, '54, opened the show by modeling the newest styles in golf clothes. Pat's coral golf skirt buttoned at the side and featured a patch pocket. The skirt and harmonizing blouse were of cotton. Marv's pale blue denim sport's suit was just made for golfing and included such innovations as a special bellows pocket for carrying golf balls. The regular suit jacket could be exchanged for a matching sports jacket trimmed in navy which matched Marv's navy cotton jersey shirt.

Colorful Cottons

Udai Brenes, '55, modeled a colorful print ensemble of red cotton trimmed in white waffle piqué. The flattering scoop neckline is very popular this spring, as is the very full skirt billowing over crinoline. Udai carried a matching print parasol and pouch bag. Pete Neumann, '54 escorted Udai, wearing a light linen sports coat featuring the new natural shoulder line. His oxford grey flannel trousers were designed with side adjustments, eliminating the need for a belt.

Linen is always popular for summer wear, and the cool-looking suit of moonstone blue worn by Peggy

Blackburn, '55, would be ideal for neatness at that summer job and could go right on out on an after-five date. Peggy chose bright coral accessories to point up the blue of the suit. Don Lathrop, '53, was all ready for any kind of weather in his raglan-sleeve, shower-proof overcoat of imported tan gabardine with its smart military collar. His harmonizing suit in the newest shade of dark cocoa featured a two-button jacket with patch pockets. A maroon tie, white shirt and dash of white in his pocket handkerchief completed the ensemble.

Paris Accent

The news from Paris this spring is the high, empire waistline and Bamb Snyder, '52, wore an empire princess-style dress in navy blue. Sparkling white touches in the pearl buttons and choker accented the dress which was worn with a brief bollero of cream poodle cloth. Navy shoes, white gloves and a pale, blue-grey hat with a navy brim were Bamb's choice in accessories. Buzz Benton, '53, modeled a notch collar, raglan-sleeve overcoat in grey tweed, grey Dobbs hat, and a navy blue worsted suit. Touches of white were achieved in his round-collared shirt and pocket handkerchief.

Quilted cotton skirts were fashion news this winter but Betty Colton's quilted dress is something even newer in styles. It was worn over a permanently starched cotton petticoat which stiffened the heavy, full skirt. A bright tangerine cape-jacket topped the gay print of the dress. Her escort modeled a tan glen plaid raincoat with the popular raglan sleeves and slash pockets. A beige sports coat and dark brown trousers were harmonized with a brown and burnt orange shoe-string bow tie. Of course, white bucks

completed the sports outfit.

Summertime is white formal time and Carole Vasterling's formal of white satin embroidered with silver threads was lovely in its grace and simplicity. A detachable fichu of white nylon net matched the very full net skirt. Her escort, Don Lathrop, modeled a white Palm Beach dinner jacket and black trousers. His maroon tie, boutonniere, cuff links and handkerchief came in a matching set.

From golf clothes to formals, it looks like the spring fashions in Ithaca will be gay and unusual this year. Look for the empire waistline, the very full skirt and quilted cottons in women's styles. And the newest fashions in men's clothes are the natural shoulder line and the round shirt collar.

Bamb Snyder shows the way in Memorial Room Fashion Show.

—Canner



Time Off

For The Teachers

By Arthur Dommen '55

This year, as every year, the faculty of the College of Agriculture sees the withdrawal of a certain number of its members. A professor's retirement becomes effective on June 30 of the year in which he reaches the age of 68. The following men have been with Cornell for many years and the University is proud of the work they have done.

Montgomery E. Robinson has had a continuous career in the Extension Service since 1914. He was then only a few years out of college and came directly from outdoor life in the West. For two years he was instructor in Public Speaking, and always maintained an unofficial relationship with that work which resulted in a demand for his services as judge of many student activities. His enthusiasm and willingness to accept responsibility gained him rapid promotion at a time when much of the pioneering work in extension was under way. "Professor Robinson's work has been characterized by his faithfulness to duty, his diplomacy in the handling of different situations, and old-fashion courtliness of manner which has endeared him to his co-workers and the many visitors to the University with whom he has come in contact." Professor Robinson is at present away on a special assignment in the Philippines. If an accord is reached between the two governments, upon his retirement he will become director of the Philippine Agricultural School.

It is indeed with regret that we witness the retirement of Professor Lewis Knudson who has filled one role or another among the faculty of the College since 1908, when he was an instructor working toward a Ph. D. For many years he was consultant to the United Fruit Company and his work effected many changes in the production of bananas and the control of disease. His research

work covered various fields in plant physiology. His investigations on orchid seed germination laid the ground for new procedures which were to completely revolutionize the orchid industry and make this treasured plant more available to the public. He also pioneered in investigating the use of carbohy-



Professor Knudson

drates by green plants.

Also a long-time man at Cornell, Professor J. E. Butterworth has been here since 1919. Director of the School of Education from 1931 to 1944, author of several books on Rural Education, (he has just completed one on School Administration) Prof. Butterworth of the Department of Rural Education expects to live here in Ithaca after his retirement. A farewell dinner will be given in his honor at Statler Hall on May 23rd.

Retiring also in June will be Professor James C. Bradley of the Department of Entomology, and Associate Professor Howe S. Cunningham, of the Department of Plant Pathology.

New Professors

New appointments in the college of Agriculture this year are few, but we may cite two in the Department of Vegetable Crops. Dr. William C. Kelly joined the staff on February 1st as Associate Professor. The Kellys, a family of six, live on a large farm outside of Ithaca. Also on February 1st, Dr. Alvin R. Hamson joined the staff as Assistant Professor. He is at present handling the extension work in processing crops, and the research and extension on dry beans. A native of Idaho, he has served in the Navy and was graduated from Utah State College.

These Bees

By Walt Wilkins '54

"Look out! They're coming right at us," was the cry of one frightened coed last May as she was walking away from Martha Van Rensselaer after her 11 o'clock class. Flying across the lawn from Comstock was a swarm of bees which caused much consternation and confusion for the next hour.

The swarm alighted to form a cluster on the branch of an elm tree near the Martha Van Cafeteria exit. A few minutes later members of the apiculture department climbed the tree, sawed through the branch and brought the bees safely to the ground, still in a cluster. They placed the swarm at the entrance of an empty hive on the lawn and the bees soon adopted it

as their new home.

These bees had swarmed from one of the two hives located outside the office windows of Professor E. J. Dyce of Apiculture at the west end of Comstock Hall. The bees are kept there as a handy and available source for class use in morphology and photography. Recently they were used for wax production experiments. Low grade honey, unsuitable for table use, was fed to the bees. When the bees filled the combs with this honey, the combs were removed and replaced with comb foundation. The honey was then refed back to the bees. Consequently, the bees had to build more combs to store this

(Continued on page 21)

Student News Digest

Dairy Science

During the school year of 1951-1952, the Cornell Dairy Science Association initiated a program of activities to further the understanding and appreciation of the dairy industry, which aims to improve the diet and health of the nation.

Prominent men in the industry were brought to this campus to speak on the latest developments in improved methods of food processing and marketing.

In the fall, one of the speakers was Mr. B. A. Bryant, General Sales Manager of the Filter Division of Johnson and Johnson, who based his talk upon his color films of the new canned whole milk process used in the state of Washington.

The Dairy Products Judging Team, sponsored by the club, won first prize in the cheese competition at the Eastern State Exposition held in Springfield, Massachusetts. The team also received first prize in the ice cream competition and second prize in the Milk competitions in Detroit.

At this year's 41st annual Farm and Home Week, the club set up an exhibit of equipment and methods used by the Dairy Industry in the late 19th and early 20th centuries, and gave a demonstration of some of the steps in the processing of cheddar cheese. It operated, in conjunction with the Hotel students, a cafeteria in Barton Hall for the convenience of the many out-of-town visitors.

At the annual presentations banquet which is held in the early part of May, the club's activities for the year will be reviewed, and officers for the next year will be announced. Awards of cash, club keys, and plaques will be presented to the outstanding students in the Dairy Industry course and to the man who, in the opinion of the faculty and the club, has performed outstanding services for the advancement of the dairy industry. The annual Dairy-Bacteriology picnic, held at the end of May, climaxes the year's work.

Home Ec

Coming up on the agenda of the Home Ec club for this spring is their annual Cherry Pie contest. Plans are not yet complete for this project, but it will be held sometime in May. Last year's Contest, held in May, was a great success, and Home Ec Club president Jan Peet '53 says this one is going to be even better.

Also on the list of May events is the tea for the seniors who will be initiated into the American Home Economics Association. This will just about wind up the affairs for the club for the year. The last of their money-raising projects, the home ec lunchroom during Farm and Home Week, which they co-sponsored with Omicron Nu, was very successful—to the tune of about \$490.00.



—Cannon

Standing: David Alee

Sitting: (left to right) Myron Kelsey, Avis Pope, Wolcott Stewart.

The first meeting of the new Ag Demecon Council (April 16) elected David Allee '53, president; Myron Kelsey '53, vice-president; Avis Pope '54, secretary; and Wolcott Stewart '53, treasurer.

The new council made plans for the delegation sent to the Mock Senate at Albany held the weekend of April 26. Representatives sent by the council were Joe Matejka '54, Keith Norton '53, Margery Schmidt '53, and Ken VanLiew '53.

4-H Club

New officers of the 4-H Extension Club for 1952-53 are John Wysong '53, president; Jacquelyn Leather '54, vice-president; June Linderman '54, secretary; and Jim Ritchey '54, treasurer.

The Club's activities will be climaxed with a picnic at Upper Enfield Park on May 14.

The recreation team conducted a meeting at Waterloo, with the Seneca County 4-H Council. The team's function is to go into surrounding counties and meet with the councils. They teach the council members some principles of game and song leading, and square and folk dancing. Everyone had a good time in the process. Dick Matthews was elected chairman of the recreation team to replace Cal Graziano and Barbara Baker, former co-chairmen.

Pomology Club

Throughout the year the Pomology Club has tried to present a program especially for those who are interested in fruits and related fields. Towards this end the club has had various speakers on such topics as entomology and marketing. In addition the club has participated in the New York State Horticultural Society program at Rochester and presented a display at the "Straight-to-the-Country Day".

Professor Elton Dyce of the entomology department showed movies of the life history and economic importance of the honey bee at the April meeting of the Pomology Club.

The season's activities will be climaxed with a picnic, probably at Taughannock Falls, on May 16. The newly elected officers are: Dana Dalrymple, president; Ivan Kepner, vice-president; and Anne Wagman, secretary-treasurer.

Undergrad Biochem

Students majoring in biochemistry have formed an Undergraduate Biochemistry Club with Professor Neal and Professor Daniel as advisors.

Dr. Sumner who won the Nobel Prize for crystallizing an enzyme was guest speaker for the first meeting. He advised the members in many matters that will help them to be successes in biochemistry and gave them a brief outlook into some of the problems they will encounter in that field.

The constitution of the club was ratified and officers for the coming year were elected. They are Eli Schessel, president; Ara Shepardigan, vice-president; and Sydney Cohen, secretary-treasurer.

The Round-Up

The Round-Up Club's officers for next year are: Walcott Stewart '53, president; Naomi Leith '53, vice president; Mary Ann Smith '54, secretary; and Glen MacMillen '54, treasurer.

George Payne received the Round-Up Club Chapter Award, presented to the senior who has been most active both in the club and in the university, and who has done the most for the Round-Up Club.

The Dairymaid Contest which the Round-Up Club was to have held this spring has been postponed. Professor G. W. Trimberger, who spoke at the last meeting of the club, said that objections had been raised by taxpayers and by others here on campus who are concerned that the university cows might be hurt by inexperienced people milking them.

The Round-Up Club looks back on a very successful year. Their most important event was the student livestock show, which they sponsored during Farm and Home Week. Club members sold ads to finance the livestock programs for the show. They also served lunches in the Wing "B" cafeteria for the Farm and Home Week visitors.

To conclude the year, the Round-Up Club members are having a banquet in the Clinton Hotel on May 13,

Ho-Nun-De-Kah

'52 - '53

Faculty

Nyle C. Brady
Glen W. Hedlund
Frank A. Pearson
Loris H. Schultz
S. Reuben Shapley

Students

David Allee
John Allen
William Ash
William Bailey
Randolph Barker
Frank Bettucci
George Boateng
Raymond Borton
David Bullard
Foster Cady
Howard Crumb
Richard Dikeman
David Dirksen
James Dolliver
Phillips Foster
Stephen Greenberg
Royce Gully
Herman Hensel
Belton Johnson
Cornelius Jones
Myron Kelsey
Ivan Kinne
Kenneth Lacy
James Lingle
Samuel Mitchell
Edward Morris
Frederick Muller
Joseph Narrow
Conrad Oliven
Stephen Schwirck
Daniel Sherman
Lawrence Smith
Robert Snyder
Ronald Space
Robert Squires
William Staempfli
Wolcott Stewart
John Tarr
Franklin Ufford
James Van Derwerken
Kenneth Van Liew
Raymond Wilkes
Jahleel Woodbridge
John Wysong

Ho-Nun-De-Kah

The activities which Ho-Nun-De-Kah men provide throughout the school year are many and varied. Freshmen Aggies get their first introduction to HNDK at the Fall Barbecue at which scholarships are awarded to the winners. This barbecue is sponsored by Dean Myers and is organized and carried out by HNDK members. This feature of the honorary's activities is one of the more recent, having been established since World War II. These same frosh never really finish with HNDK, for throughout their college life they are affected by its activities in one manner or another even to their last day at Cornell. This is not too far-fetched because the last function of each year's members is the parents-faculty tea which is held on the Sunday afternoon during Senior Week to permit parents of the graduates to become acquainted with the faculty.

Other activities of the society which bear prominence during the course of the year's activities are the selection from the nominating slate presented by Ag-Domecon of five professors to be voted on by the students at large for the presentation of the Professor of Merit Award. This award is given each year to that professor whom the student body feels has done the most for the students, their education and their college life.

Like all other organizations, societies, and the like, HNDK has had an interesting history which is definitely reflected in its solidarity and strength as it exists today. Founded in 1929-30, it came into being as an outgrowth and an ultimate combination of two previously existing honoraries, named Hebs-sa and Helios. Hebs-sa selected its members on the basis of activities and Helios on scholarship alone. Because of the keen competition between these two societies and a student body which at the time had declined to a number of about 600, they were merged and HNDK was born.

Introducing Your Friends

Bill Hoffmann

Meet Bill Hoffmann, an active dairy science senior and business manager of the **CORNELL COUNTRYMAN**. Bill was interested in agriculture way back in high school, a fact evidenced by his attendance at Newtown, a vocational agriculture high school in the heart of New York City. There he learned more and more about Cornell from Cornell agricultural bulletins, the **COUNTRYMAN**, and from some of his teachers who were Cornell alumni. When he first entered Cornell he hoped to be a dairy scientist, but now his chief interest is dairy products marketing.

He became a member of the Dairy Science Association and the **COUNTRYMAN** in his freshman and sophomore years. As a junior he was elected to Ho-Nun-De-Kah, an honorary agricultural society, and Pi Delta Epsilon, a professional journalistic society. In addition, this year he is a dorm counselor and was on the Dairy Products Judging Team. Bill says that his selection as Outstanding Dairy Science Junior last spring set off a chain of wonderful events. Since then he has been awarded the New York



Bill

City Milk Dealer's Association's \$400 scholarship, and the Milk Industry Foundation's title of the Leading Northeastern Dairy Science Student which won him a trip to the Detroit convention celebrating the centennial of ice cream in the United States.

Bill's hobbies are collecting stamps, coins, and one dollar bills—all serial numbers. However, he has been having trouble keeping the latter in his collection.

As a dorm counselor Bill has had the opportunity to meet many new students. One of the lesser known duties of a dorm counselor is that of supplying first aid supplies to students for minor accidents. He says that for every student that comes for advice, ten others come for a bandaid.

Bill believes that the most important thing in life is people, for no matter what we do, or where we go, our lives are made brighter or darker, depending on our relationship with them. He feels that his years at Cornell have been profitable in that he has had the opportunity to associate with so many friendly people.

Next year he hopes to do graduate work in marketing dairy products if the Army Quartermaster Corps permits. We hope that he will be here, as a grad and as our friend.

Anna Maier

With women invading everything today, it is not surprising to see even the boundaries of Ho-Nun-De-Kah being crossed by a favored few. Anna Maier is one of those who has been so honored, and it is quite understandable when you consider her scholastic achievements and vivacious personality.

Agriculture is nothing new to Anna for she came to Cornell from a 140-acre dairy farm near Nassau, New York. Enrolling first as an animal husbandry major in the two year course, she had planned to



Anna

prepare herself for a county agricultural job. "Not exactly a county agent," she said, "but some sort of an assistant."

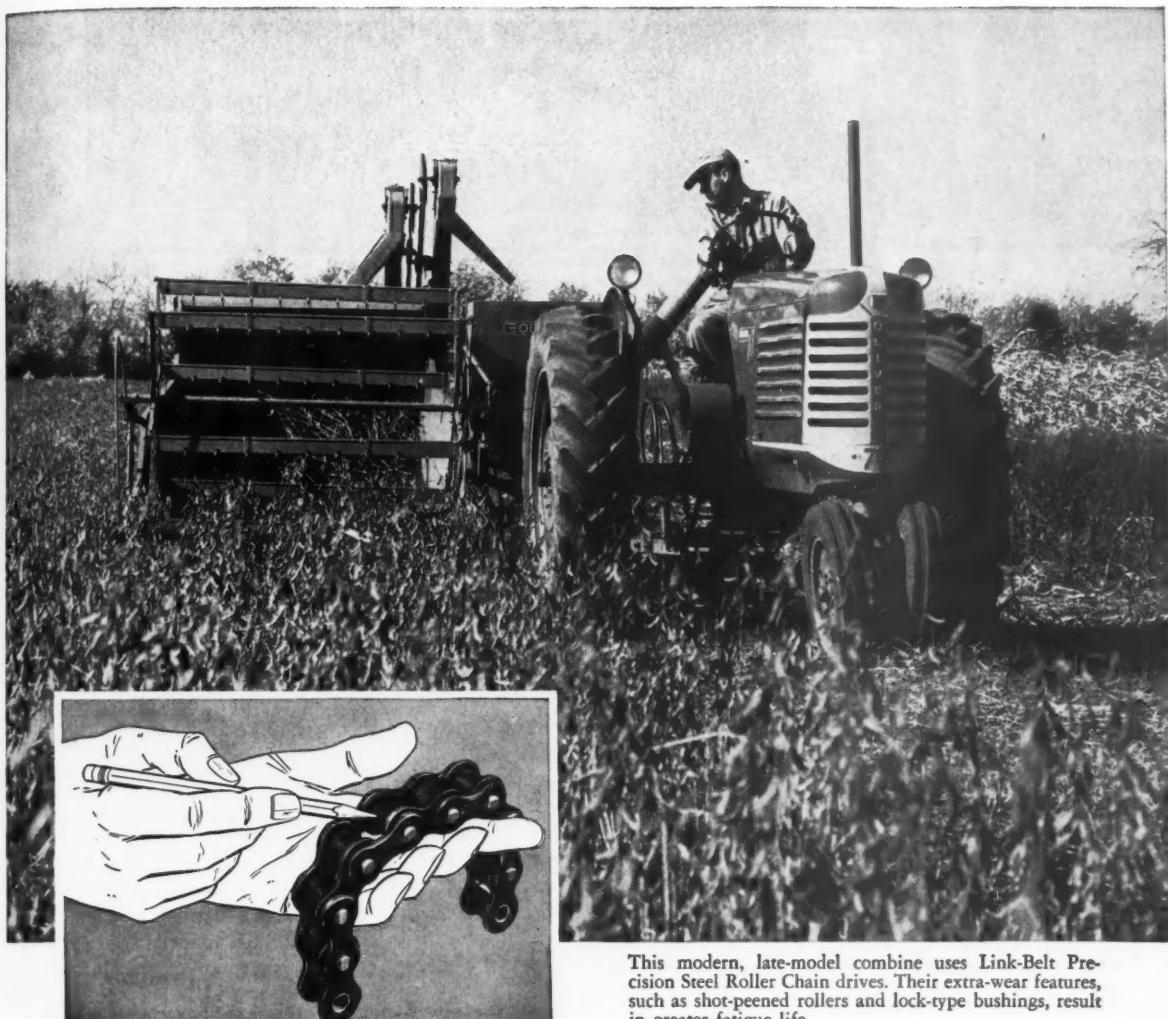
Like many other two-year students, however, Anna decided to transfer to the regular four year course. In addition she changed her major to ag ec.

Anna's interests are not just confined to her studies. She is a member of Kappa Delta, Newman Club, has participated in WSGA as a dorm V.P., and is a member of the **CORNELL COUNTRYMAN** business board. In addition she has a variety of "just interests" which include swimming, square dancing, and tennis.

Physics might have been mentioned with interest but this proved to be more of a disease than interest for Anna. "Be sure to mention the physics," she smiled, "in case there are any who haven't heard me complain about it."

When asked about her after graduation plans, she replied, "That's a hard question because I don't really know. My main idea is obtaining a position involving ag ec." One field that interests her is milk marketing, and her future job might well be in the statistical department of a milk organization.

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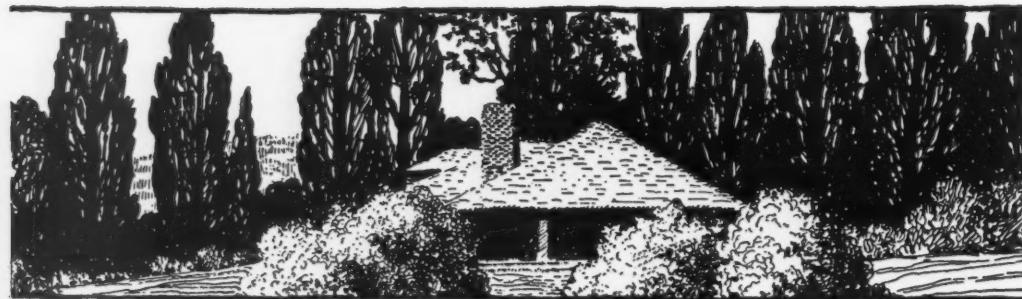
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Alumnnotes

This month the COUNTRYMAN reports to you on some alumni who have made an outstanding contribution in their chosen fields.

JESSE M. OTIS, '44

Jesse R. Otis, now president of Alcorn A & M College in Mississippi, received his Ph.D. from Cornell in 1944. His undergraduate days were spent at Iowa State College.

Previous to attending Cornell, Mr. Otis had farm experience in Michigan and business experience in Tennessee. After leaving Cornell he was associated with Tuskegee Institute where he was successively head of the dairy department, the agricultural economics department, and Director of Agriculture. While at Tuskegee he also spent considerable time in developing the dairy herd.

After serving as Alabama State Leader of County Agents, Mr. Otis assumed his present position as president of Alcorn A & M College in Mississippi.

JOHN W. SPAVEN '36

John W. Spaven, extension editor at the University of Vermont and State Agricultural College, has been granted a one-year leave of absence by the Board of Trustees to accept a position as information specialist with the Mutual Security Agency's Paris office.

Spaven will report to Washington, D. C., on May 1, for a week's indoctrination training at the Department of State. He and Mrs. Spaven will fly to France on May 9.

Graduated from Cornell University in 1936, Spaven was editor-in-chief of the CORNELL COUNTRYMAN in his senior year, as well as advertising manager of Kermis and editor-in-chief of Spring Day

Scoop. Upon graduation, Spaven accepted a position as assistant extension editor at the University of Massachusetts, where he worked for three years before entering the U. S. Navy. He has been extension editor at Vermont since 1946.

Although he will be assigned to the Paris office of the Mutual Security Agency, Spaven, one of two state extension service editors selected for the special European assignment, will travel throughout Western Europe. He will be a member of a team of specialists who will help European nations increase their agricultural production. It will be his job to devise information techniques which will influence farmers' actions. Spaven will also develop greater interest in agricultural information material of all types in the various countries he will visit, says Dean Carrigan.

Mr. and Mrs. Spaven have been residing at 505 North Street, Burlington.

JOSEPH P. KING '36

Birds-Eye Snyder's agricultural development chief Joseph P. King is one of the college's outstanding alumni.

Joe King came to Cornell back in 1933 from the University of Nebraska where he began his collegiate training. He had hoped to play some football here, but was injured early in his first season and consequently was unable to make further contribution.

He won first prize in the Rice Debate Competition and was president of Ho-Nun-Da-Kah his senior year.

Following graduation he put down his ear-lappers and headed north to county agent work in St. Lawrence County. During the war

he served as a farm labor co-ordinator in the War Manpower Commission. Following the surrender, he began a new career with Birds-Eye Snyder.

Joe is coming to speak this spring at a Speaker's Series Program. For students interested in the canning industry, we recommend Joe to you.

MORT ADAMS '33

Mort Adams' success in college seems to have followed him through his career as county agent in Wayne and St. Lawrence counties to the Alton Canning Company, where he is directing the operations of the Burns Farms. Mort graduated in '33, after a full four years at Cornell. He was on the COUNTRYMAN staff, Chancellor of Alpha Zeta, a member of Ho-Nun-Da-Kah, and president of Round-Up Club. He got a good start working his way through college, and has been successful ever since.

After graduating, Mort worked for a while as an assistant 4-H agent, and then went into county agent work, beginning as an assistant in Cayuga county in 1933. From there he went to Wayne county, where he held an assistantship until 1936. In April of '36 Mort went to St. Lawrence County as agriculture agent, and in 1939 went back to Wayne county again, this time as full agent. He resigned his post there in February 1943, to join the Alton Canning company in Alton.

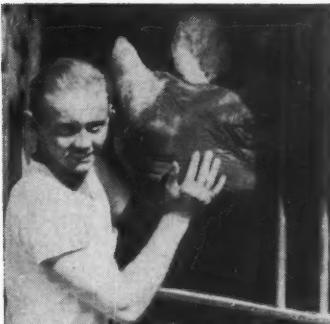
Mort's interest in 4-H has been handed down to his youngsters, who are also active in the program. The Adams' have sheep on their farm now, and one of the boys took part in the International Livestock show in Chicago, awhile back.

What To Do

By Joan Metzger '55

Finals over! Last book closed! No more prelims or assignments to worry about. The good old summer time is finally here. What are you going to do this summer? Go swimming, loaf, work, finish up some farm practice? Or haven't you decided yet? Let's see what some other Cornellians have done with their summers.

How would you like to work in a menagerie? Ed Wilkens '52 worked with Ringling Brothers' Circus for two summers, taking care of hippopotamuses, cats, and giraffes. We've all heard about people telling a polly to talk for a cracker. Well, here's a new twist. The giraffes in this circus were taught to lick peoples' faces for giraffe crackers. Of course working in a men-



Ed Wilkens and Friend

agerie wasn't exactly peaches and cream. Have you ever cleaned up after a rhino? If you haven't, then you don't know what it is like collecting twenty loads of droppings daily from each rhinoceros.

One of Ed's biggest thrills came when he went to the World Jungle Compound and met Mabel Stark, the sixty-year-old tiger trainer, who is a big legend with the circus. Although she has been ripped apart many times by her cats, she is still at her job. The summer soon ended, however, and unhappily, Ed had to fly home for that "miserable fall term."

Let's get into a traveling spirit and take a ride up the Alcan highway to Alaska with Jerry Nisenson '53. Jerry had heard glowing tales about Alaska and decided on the spur of the moment to make the trip. His '39 Pontiac with its baggage trailer attached created quite a spectacle as it bumped along the rough dirt roads. Traveling was slowed down at one point thanks to an old Moose and her calf who decided to trot along in front of the car. Insects were also bothersome, making it necessary to stop every fifty miles to scrape the windshield clean.

As for Alaska itself, there are many jobs and opportunities for ambitious men. In 1949 construction companies paid \$1.65 to \$1.85 per hour for unskilled laborers. The cost of living in Alaska makes saving difficult. A bottle of beer or a hamburger each cost around fifty cents. A bottle of milk comes to around a dollar. Mining, clearing land, and working in salmon canneries are a few of the jobs available.

(Continued on page 19)

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How's Your Math

By Dot Nielsen '55

"A committee was set up by the dean in 1949, at the recommendation of the ag faculty, to study the problems arising from inadequate preparation in mathematics and to devise solutions for these problems, stated Professor B. L. Herrington, professor of Dairy Chemistry, who is at present the chairman of this committee.

The faculty has noted that there are a great many courses other than straight math courses which are causing students trouble because of the math involved in them. Chemistry and physics are the

chief troublemakers, but other courses, such as some in Ag Engineering, Surveying, and Conservation, appear to require a greater knowledge of math than the average student has. The professors of all courses in agriculture were asked to test the types of problems which were essential to proper understanding of their respective courses. These were compiled into an examination which included problems in averages, square roots, interpolation of tables, equations, word problems, and other familiar types. It was actually a survey of math and contained few problems beyond elementary algebra in difficulty.

Results

This exam was given to the entire freshman class in the fall of 1951. It was given again this spring to a volunteer group of 100 ag seniors; it is believed that although this is only about one fourth of the class, it represents a fair cross section. The results of the two classes have been recorded, and out of a possible score of 55, the freshman class had an average of 36 with a range of 6 to 53. Thirty-nine percent of the four year students failed the exam (with below 60% taken as failing), and 79% of the two year students. In the senior class there was a grade average of 71.16%, and a range of scores from 16 to 53. The percent mortality for the seniors was 11%.

In addition to taking the exam the seniors were asked to answer a questionnaire with information concerning the size of high school attended, the courses in math available to them in high school, the math courses actually taken by them, and their opinion on their preparation in math for college work. They were also asked if they would recommend a refresher course in high school math to be given to freshmen who do poorly in the entrance tests; 80% of those questioned agreed that this would be desirable.

These seniors who had taken only elementary algebra had an average score of 36.47, those with intermediate algebra a 41.37 average and those prepared with advanced algebra scored on the average 45.12. Sixteen students had not taken intermediate algebra, and all of these reported that they felt they had been poorly prepared in math for college work.

When those who had taken the exam were asked to comment on it, the people having three or more years of math found it quite easy, while those with less than three years called it "not too hard" or "average" in difficulty.

There has not yet been any action toward the solution of the problem, but steps will be taken to remedy it when the committee's recommendations have been made to the faculty.

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What To Do

(Continued from page 17)

Have you ever thought of being a fire fighter? Frank Brunstetter '53 headed for Oregon one summer and was hired to maintain forest trails, but because of a dry summer, he spent two thirds of his time fighting fires. Frank said that the hours were long and hard and the food was not too good out on the line.

For the wanderlust, how about an economical trip. Why not travel from national park to national park and pitch your tent for free. Ruth Chipman '53 says "there's nothing like it." "Chip" is an amateur mountain climber, her mother a botanist, and her father a photographer. In order to keep the whole family happy, they have always had to go places where there are mountains, flowers, and views for good pictures. The parks solved their problem.

Hostling Trips

Perhaps you're interested in going on a group trip. Jean Keller '55 bicycled all over the west and part of Canada with the American Youth Hostel. The group visited many interesting places, including the Grand Canyon and Yosemite National Park. In all, they cycled about nine hundred miles. Living on a dollar a day food allowance, the cost of the trip was about three hundred forty dollars.

There are many organizations on campus that sponsor excursions. The Cornell Outing Club is planning a canoe trip to Algonquin State Park in Canada, after finals, for anyone interested. In the week before school begins next fall, a trip is planned to the Adirondack Mountains. Mountain climbing, camping, square dancing, and numerous other activities will be on the agenda.

There are just so many things you could squeeze into that short summer vacation. Of course if you can't decide, there is always summer school and swimming in Beebe Lake.

Grandma's Bible

Why has grandma been reading her Bible so much lately? *Answer:* She's been cramming for her finals.

Correction

A statement made by Dean W. I. Myers in the synopsis, "Our Considered Opinions," in the April issue of the *COUNTRYMAN* has been inadvertently attributed to Herschel D. Newsom, national master of the Grange.

In regard to the economic outlook, Dean Myers (not Master Newsom) said, "There are plenty of serious problems, of course, but the outlook is not as discouraging as pessimists would have it. It is true there is a great need for balanced judgment this year in view of the coming political campaign and its violent controversies."

Teacher's Troubles

From the Springfield, Ill., *Public Schools Bulletin*: "Mr. and Mrs. Calvin Rippel are recovering from auto accident injuries. Mr. Rippel will teach high school industrial arts this fall instead of driver training."

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ARMOUR
AND COMPANY

Weather

(Continued from page 5)

—“The place with best weather in this country.” The corporation found that silver iodide sprayed into the upsweeping air currents from ground generators was more efficient than airplane seeding. The generators are stoves about the size of cabinet radios which vaporize the silver iodide.

Ranchers heard about the Corporation and what it thought it could do in the way of increasing precipitation. During wheat-growing and cattle-fattening season, ranchers and farmers are willing to try anything that promises more rain. So the Corporation was approached by a few men who said they would supply the money for rain-increasing experiments over their land.

The area was seeded during June, 1950, when the conditions were right, and the trial seems to have been successful. Rainfall increased 430% over the normal total for that month! Other ranchers and farmers contracted with the Corporation for rain and snow increas-

ing operations. By the end of 1950, 100 million acres in eight states were under contract.

Weather modification changed from the experimental stage to a solid business. This year the Corporation has over 300 million acres under contract for rain increasing, snow pack increasing, or hail suppression.

Dr. Krick says that his company can guarantee to double anything that comes along. While the storms are there, he takes advantage of them. He never undertakes a job until the chance of success, both from the weather and economic standpoints, is good. After a year of trying rain increasing, Westerners state, “We never had as good grass before.” Wheat growers reported their 1951 harvest to be 5-12 more bushels per acre than they had expected.

Benefits

The U. S. Weather Bureau maintains that rain fell only where it was going to rain anyhow. Westerners reply that, “if it is God’s work, it’s mighty peculiar how He works best right behind the silver iodide generators!” So the West is going ahead in 1952 with its weather control program.

Corollary results of experiments have appeared, which have obvious applications to the East. It is possible to prevent rain, instead of increasing it! Lightning storms, hail storms, and hurricanes may be calmed down. Slower steadier rains, instead of torrential gully-washers, are produced.

Cloud seeding may bring moisture to entire continents where famine prevails and help increase the crop yields so people can feed themselves.

Obstacles

However, problems are springing up all over. The large Mid-West floods, and any excessive rainfall in the East, are being blamed on indiscriminate cloud seeding in the West. New York City has 170 damage suits against it right now as a result of the city’s rainmaking project last year.

Many amateurs without scientific knowhow are seeding clouds,

which can interfere with any scientifically run large-scale experiments. Sunshine Unlimited, a Washington state organization, whose members don’t want extra rain, plans to put duplicate generators wherever the rain increasers operate this year.

Some kind of controls will have to be imposed upon the weather controllers. The state and federal governments are only starting to approach the problems of laws and licenses. The Westerners would prefer to leave the Federal Government out of it and run their own show.

The legalities involved are completely unexplored. To whom does the sky belong? Can you steal a cloud from another man? What does God think about all this? Man has acquired greater control over the weather than he had any right to expect. Can he use this power wisely?

Fisherman's Picnic

From *Sunset Magazine*: “They will visit Martinez Lake for catfish and bass fishing. There will be a beef barbecue after the fishing.”

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Bees

(Continued from page 11)

honey, which meant more wax production. Intensive work in pollination experiments did not allow the department time to determine the value of this new wax experiment method.

One winter a few years ago, the bees were supplied with a heater beneath the hive to see if it would have favorable effects in preventing bee loss due to freezing temperatures. This experiment, the first of its kind, proved unsuccessful. The bees raised too much brood because of the warm temperature and soon used up their food supply. This would have meant death to the colony, if they had not been fed sugar sirup to carry them through the rest of the winter. The sugar sirup also increased the activity of the hive so greatly that on the first warm day suited for outdoor flight, many bees wandered far from the hive. Since they were unfamiliar with their surrounding, many could not find their way home.

Professor Dyce recalls one youngster of six years trying to show off outside his window to two little girls of about his same age. The boy would run back and forth in front of the hive to show his valor and bravery. Then he would strut in front of the two terrified girls and call them sissies. On his third dash past the hive, the bees, angered by his sudden motion, took after him. Unfortunately, he was wearing short pants. You can well imagine that this took the stuffing out of him.

The next time you get a chance, take a look at these hives and watch the bees about their various activities at the entrance. Perhaps, you may be fortunate enough to observe the emergence of a swarm. If you approach the hives gently and do not cause a disturbance you probably won't get stung. But don't go around tapping the hive or making any fast motion near the entrance. You may get the stuffing taken out of you.

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Female On A Farm

(Continued from page 9)

progressive operation of our farm. On one such occasion they discovered us planting corn—when all around the neighborhood the corn was knee high and then some. Our explanation was simple—if you planted late you avoided Japanese beetles. The fact that you also avoided ears didn't bother us. It was for silage anyway. I remember after I had been there three weeks I was not the least surprised when the Soil Conservation man asked me—rather sarcastically—when we intended to plant bananas. "Oh, not this week," I informed him, before I realized he had said anything unusual.

The following summer I found myself in Wyoming with the fond intention of becoming a cowpuncher. I discovered to my sorrow that despite its claim of being the Equality State, Wyoming was as biased as anywhere else on the job front—at least until you got to know the right people. When I descended on the Unemployment Office in Sheridan, I did not know

anybody. The Agriculture Placement desk was surrounded by several sheepherds and a couple of Crow Indians, who shuffled aside to let me through. The officer was very nice; he even offered to take me along the next day when he prospected for jobs on nearby ranches. At nine o'clock in the morning we were looking for jobs all right—seated at a bar in a tiny town called Dayton, while he breakfasted on three cans of beer. The most amazing people kept wandering in and out, including a world famous bronc rider of bygone years who was trailing a few thousand sheep up into the mountains; and assorted housewives who had rushed across the street for a nip after finishing the dishes. There were no jobs. The next place we stopped at was the local coal mine. I managed to convince my companion that I had absolutely no desire to become a miner, and we proceeded to a crossroads grocery for more gossip and beer. He kept saying that he had to keep in touch with local opinion, but he remained happily unaware of mine.

Gal Gets Job

After that memorable day I took job-hunting into my own hands, and before long was situated on a high class purebred Hereford ranch which has achieved national reputation for its champion polled cattle. I regret to say that my tour of duty that summer was restricted to the house. The owner had done everything from driving a stagecoach to fighting in the army against Pancho Villa, the Mexican bandit. He had built the ranch up out of literally nothing, and he was too smart to hire any amateur dude girl to monkey around his cattle. I was amazed to learn some of the ways they handled them. Whenever they put a new bull into the carload lot of yearlings, which they were fitting for the shows, they would smear limburger cheese all over him. That way the other bulls wouldn't pick on the newcomer; otherwise they were apt to knock him down and kill him. There was some extraordinary help there that summer, including a bewhiskered cowboy from Arizona who entertained us with endless tall tales

about his personal adventures in a world of women, Indians, and wild rodeo bulls. Such characters as he—and there were many of them—made it a worthwhile summer in spite of all the dishwashing, which I resented.

I'm sure you will agree that farming presents its challenges, especially to young ladies. The place where a girl can find a job is bound to be unusual, sometimes alarmingly so; and often the only thing that pulls her through is a broad sense of humor! But the important thing is to go ahead and take a crack at it. Lively days can lie ahead for the gal who takes this "Man's World" by the tail—and is wagged around in a wealth of memorable experiences.

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Westward

(Continued from page 7)

Ranch decided Dot against this job.

Challenged by the spirit of adventure, all the girls except Joan and Donna plan to look for jobs when they get West. Margot's main requirement is a job where she can keep her horse, while Than needs summer experience in some phase of textile work. Lorrie wants to go to California, while beachcombing on the shores of Washington appeals to Dot and Esther.

With less than four weeks until our plans become reality, we decided to list some of the advice we have received for future reference.

General advice, "Travel light." (Donna's mother already has her wardrobe for the summer planned—a suit, two pairs of dungarees, wool socks and sweaters, a slicker, and JUNIOR BLAZER.)

Tex Severns: "Be sure to tie cans of water on your bumpers to drink when you cross the deserts."

Fred Muller: "Don't leave without your Rocky Mountain Spotted Fever shots. And be sure to have

good recommendations from the college to help you get jobs."

Than and Joan's relatives: "Watch out for the bears and snakes."

Judy Zucker: "Take a day by day account of what happens for future reference."

Ellen McCulley: "It's rough driving through the canyons, so take it easy—and don't miss Glacier National."

Conrad Oliven: "Get to know lots of cowboys, maybe you'll appreciate Cornell men more."

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A Moment For Reflection

To: The CORNELL COUNTRYMAN:

I have greatly appreciated an opportunity to visit with you this year through this column, and am glad of this one more opportunity to do so.

Some of you graduate this year. Now, in the month of May, you will be acutely conscious of the fact that, unless you are going on for graduate work, college is over for you. Seniors will be remembering courses and experiences which have made college rich and a source of rapid personal and professional growth. They will also be thinking about some of the courses and experiences they now realize would have been valuable had they planned for and taken them.

Juniors are, perhaps, the lucky ones. They are far enough along to evaluate some of the things they have gotten from college to date, and to realize that there are some valuable things they wish they had gotten. They still have another year in which to fill in the gaps.

Sophomores should have some perspective because they are half way through. Freshmen are limited in this evaluation because they are not yet far enough along to have experienced many of the possibilities or to have discovered what type of possibility is most valuable to them. Both sophomores and freshmen can lengthen their perspective by quizzing seniors about things. The seniors can be of real use if they are willing to pass on to others their experiences and their "I-wish-I-had's."

So we bring our year to a close with review, evaluation, and plans for the future. I wish you a happy and profitable summer. We shall look forward to seeing our freshmen, sophomores, and juniors back as sophomores, juniors, and seniors next Fall, and the seniors back as alumni any time they can come, but certainly in 1954, 1957, and thereafter every five years.

Elizabeth Lee Vincent

To: The CORNELL COUNTRYMAN:

The pre-registration period, which has just ended in the College of Agriculture, calls to our attention the important responsibility and privilege of each student to think carefully of what he wants from his academic work in college. The requirements are flexible and the opportunities for choice are many and varied. This gives each student freedom in rounding out a program, within a general framework, in terms of his particular objectives and interests.

Students would enjoy their college work more and would get more out of it if they would, early in their course, carefully work out a full four-year program for themselves. It would take study and advice and there would probably be changes from time to time. Their objective here, however, would be clearer and they would have established the first step towards a better education.

A piecemeal program, arranged one term at a time, does not take a full view of a four-year college education. A student who plans wisely can get a good education in Agriculture and still have the equivalent of from one to two years for broadening and enrichment in this and other colleges on the campus. This does not necessarily apply as much to some of our specializing students as it does to those of more general interests, but the latter group is a relatively large proportion of our students.

I want to offer every bit of encouragement that I can for our students to think and plan carefully for their four years here, so that they may get the utmost from the time they spend on the campus. My hope is that they will establish the practice of taking full advantage of their freedom to choose. The advantages of freedom must be used in order to be realized.

—A. W. Gibson

After Winter . . .

And the seasons move slowly by . . . And spring comes once again to the land and to humanity. To some it comes as a mere breath upon the cheek, to some it comes as another milepost along the road. To others it comes as a warmth, as a sweetness, as a blinding greenness that seizes the very soul and holds it, powerless to resist, in an enigmatic grasp. But to all, spring brings a joy never to be put into words.

To the painter, spring is a benefactor pregnant with substance. Even to the late skier in the cradle of the loftiest peaks, spring is not the end of the snow but the birth of an entirely new world. But to the tiller of the earth, spring brings the deepest gratification of all. Surely the smell of freshly-turned fields, the sight of streams swollen with muddy water, have something magical about them. Here at last is the inspiration of the coming year. Shaken free from the snows of January and February, escaped from the shackles of March gales, here is the feeling of gladness, the soul-stirring exhortation which one senses as if for the first time in all its freshness. Already the buds

burst their shelters, already the shoots pierce the ground and the grass grows thick, already the corn stretches as far as the eye can see—off into the infinite distance, tall and strong.

This is the dream of spring, this is the embryo of hope that is nourished slowly to maturity, this is the good and the just and the pure of life. This is the truth. The sleeping creatures awaken; and perhaps, like them, some of us, one or two, shall also stir from our blessed slumber and open our eyes to the brilliant light, and wonder. And perhaps one day we shall not need to wonder any more why man slaughters man in muddy fields far away, why guns roar and spit their hell-fire, why human cries of anguish echo futilely upon the grim hulks of gigantic war-machines. There shall be no wondering, for there shall be no one to wonder. Silence. Then, over the untilled fields, the briars spreading stealthily, and over the plows and the harvestors abandoned in their places, the rampant vines and ferns, creeping, creeping, creeping . . .

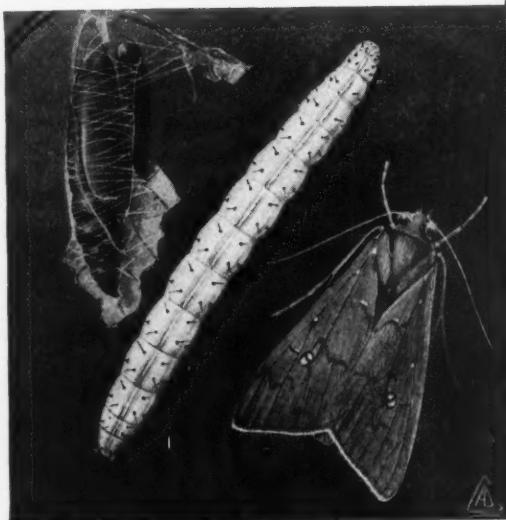
Arthur J. Dommen

THE CORNELL COUNTRYMAN

insects

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COTTON LEAFWORM

Alabama argillacea (Hbn.)

The presence of this familiar insect can be detected by ragged or stripped leaves. The full grown worm is about one and one-half inches long, greenish with stripes—with black spots all over its body. Essentially a tropical insect, the moth or miller migrates to the cotton belt each season.

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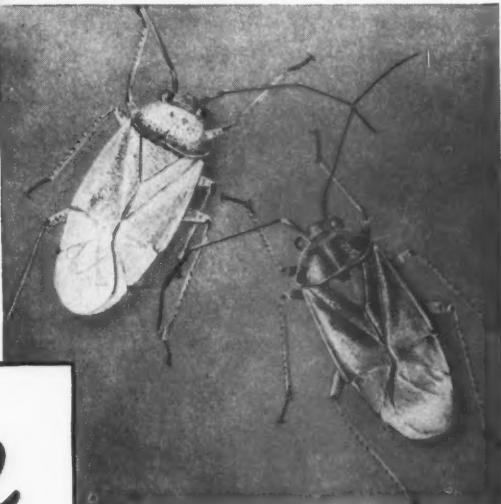
INCORPORATED



RAPID PLANT BUG

Adelphocoris rapidus (Say)

The adult bug is about one-third of an inch long, its color is dark brown with narrow yellow band along the sides of its body. In early stages of growth they are light green with red markings. Rapid plant bugs attack cotton squares and young bolls.



LYGUS BUGS

Lygus elisus Van D., *Lygus hesperus* (Knight)

These bugs play havoc with many crops—especially cotton in the Southwest. Adult females are straw-colored . . . males are darker with red and brown markings. They are almost one-quarter of an inch long.



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FROM GEORGE D. WILLIAMS,
BROOK, INDIANA

"Last fall I plowed 30 acres of hard ground—silt loam and gumbo—with Spearhead points on my McCormick Plow Chief bottoms. Twenty acres were in alfalfa and clover, and 10 were in sweet corn ground. I compared the wear on Spearhead points with conventional shares. Based on actual field test comparison, I know that Spearhead points outwear and outlast conventional shares *three to one.*"—George D. Williams.



"They sure can take it in hard plowing," Paul Frye (left) tells Walter J. Buege of Sheldon Implement Co., IH dealership at Sheldon, Ill., as they check wear on Spearhead points.



"No more share sharpening for me," George D. Williams (left) tells Milton Storey of Baird and Storey Implement Co., Morocco, Ind., as they check performance of Spearhead points.

Development of the Plow Chief bottom with *exclusive* replaceable Spearhead point and matching share blade is the answer to a need for low cost plow shares to eliminate share sharpening. Ten years of development and testing by International Harvester engineers provided this answer... proof that research *pays dividends in better IH products for the American farmer.*



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